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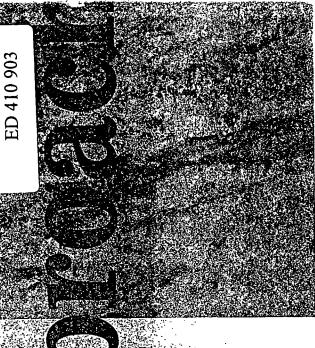
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ABSTRACT

This document proposes a plan to significantly increase the number of fully prepared freshmen at Ohio's colleges and universities by the year 2001. The plan, prepared by the Ohio Secondary and Higher Education Remediation Advisory Commission, makes five recommendations: (1) communicate a consistent set of college-level expectations and articulate a clear college-readiness path for students; (2) begin promoting college readiness early in the educational process; (3) support and share successful teaching and learning strategies through a collaborative learning extension program; (4) target a percentage of each year's developmental funds toward collaborative programs that focus on college readiness; and (5) support development of a total system approach of the K-12 and higher education communities. The report supports these recommendations by defining the fundamental problem to be an educational system that identifies and remediates only after students have graduated from high school and entered college; by answering several key questions regarding developmental education; by listing benefits to be derived from the proposed plan; and by suggesting ways to use funding incentives to reduce developmental enrollments. Appendixes define terms, review data sources, summarize existing strengths of the state system, review experiences of other states, and list the names of interested persons. (CH)

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A Total Approach

Improving College Preparation in Ohio

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June, 1997

Dear Colleague:

We are pleased to submit the enclosed plan outlining a total system approach for reducing the levels of remedial work at Ohio colleges and universities.

This plan represents over six months of reflection, discussion, data collection, and analysis by the Secondary and Higher Education Remediation Advisory Commission. We believe that the Commission listened to a full range of ideas from all stakeholders, considered the problem from different perspectives, carefully evaluated the benefits and drawbacks of approaches proposed by other groups, and arrived at the approach that would be most efficient and effective for Ohio at this time.

The total system approach recommended by the Commission in this report, if implemented fully, will reduce developmental enrollments among traditional age freshmen by at least 15 percent within five years and will result in further reductions after five years. Most importantly, the reductions will be achieved not by drastically restricting college enrollment, but rather by helping students accelerate and enhance their progress toward college readiness during the high school years.

This total system approach is based on five recommendations: to communicate college-level expectations, to develop a continuum of early assessment and intervention, to create an Ohio Learning Extension, to target existing resources, and to create a common agenda.

The plan, above all, calls for collaboration between the higher education and K-12 communities. We feel that the relationships that will result from the dialogue, planning, information-sharing, and activities described in this plan will continue to generate even more new ideas for improving college readiness.

We look forward to working with you in your efforts to analyze our recommendations and are ready to take the next steps in improving college readiness, among Ohio's next generation of high school graduates.

Sincerely,

Kang Manyken

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Improving College Preparation in Ohio:

A Total System Approach

Executive Summary

Ohio's Secondary and Higher Education Remediation Advisory Commission (SHERAC) proposes a plan to significantly increase the number of fully prepared freshmen at Ohio's colleges and universities by the year 2001 and beyond.

In Fall 1995, approximately 63,000 recent graduates from Ohio high schools enrolled in the state's public colleges and universities. Because of Ohio's commitment to open admissions, most of these students were able to attend the public institutions of their choice.

But about 27 percent of these entering "traditional age" freshmen—over 17,000 students—were not fully prepared to do the work required in freshmen-level courses. Therefore, after assessing these students' needs, institutions matched them with *developmental* courses and services designed to help underprepared students achieve college readiness.

The state's two-year community and technical colleges, which have been designated as Ohio's entry points for underprepared students, placed 42 percent of their new traditional age freshmen in at least one developmental course in Fall 1995. At two-year regional university campuses, the percentage was 32 percent. Among the state's public university main campuses, 20 percent of entering traditional age freshmen were placed in at least one developmental course—15 percent among universities with a residential emphasis and 24 percent among the campuses that place a major emphasis on serving minority students and economically disadvantaged students from urban and rural areas.

The total cost to taxpayers in 1995 of subsidizing developmental courses for traditional age freshmen was roughly \$13 million. This amount represents about 43 percent of the \$32 million that was needed to subsidize developmental enrollments for students of *all* ages. While few would question the economic soundness of spending \$19 million to provide developmental courses for the adult learners who returned to school in 1995, legislators are questioning the efficiency and effectiveness of spending \$13 million to provide developmental courses to recent high school graduates. Why, they ask, should the state pay twice to prepare students for college? Why should scarce higher education funding be used to teach what most students are taught in high school?

Is there a better way?



Charge to the Secondary and Higher Education Remediation Advisory Commission

The Ohio Board of Regents and the Ohio Department of Education have been seeking system articulation since 1981 when a joint Commission recommended a core college preparatory curriculum.

In 1995, the need for more direct solutions to the problem of remediation levels among recent high school graduates was voiced by legislators and was underscored by a report from the Legislative Office of Education Oversight (LOEO). As a result, the Chancellor and State Superintendent agreed to pursue a joint focus once again, and they created the Secondary and Higher Education Remediation Advisory Commission (SHERAC). They charged the Commission with preparing a plan to significantly reduce the levels of remedial work required by students entering Ohio's state-assisted colleges and universities.

Because of the vital role developmental education plays in the success of older returning students, the Chancellor and the State Superintendent directed the Commission to focus solely on students entering college as first-quarter freshmen directly out of high school.

The Purpose of This Document

For six months, the Secondary and Higher Education Remediation Advisory Commission studied and discussed the complex problem of high school graduates who are not fully prepared for college-level study when they enter Ohio's colleges and universities.

Members collected and examined data and information about existing college expectations, assessment tools, intervention strategies, and developmental programs. They also conversed with representatives from other states about their collaborative efforts to reform K-12 curriculum, instruction, and assessment, as well as college admissions, placement, and articulation.

This document presents the Commission's findings, and, as requested, its plan for reducing remedial work at Ohio's colleges and universities.



The Commission's View of the Problem

The Commission proposes that developmental enrollment levels—although important from a cost perspective—are not the problem. They are a symptom. The fundamental problem developmental enrollment levels reveal is this: Ohio's current educational system identifies and addresses a lack of college readiness only after students have graduated from high school and entered college.

Ohio needs to view college preparation as a day-to-day process that begins early in a child's life and intensifies when a student enters high school.

The only way to support the process of preparing for college is to view levels of developmental enrollment in Ohio as a total system problem that requires a total system approach.

The Proposed Plan: A Total System Approach

The Commission is proposing a plan that focuses the collective expertise and resources of both the K-12 and higher education systems in Ohio toward a shared objective—to increase significantly the number of Ohio high school graduates who are fully prepared for higher education by the year 2001 and to continue pursuing improved college readiness beyond 2001.

The Commission's proposed plan is the most efficient and effective approach to increased college readiness because it represents a total system approach.



The Commission's plan does not propose isolated changes in different parts of the system. It does not shift the burden from one part of the system to another, nor does it create sharper divisions and promote competition among educators. This plan distributes ownership and responsibility for each proposed activity among all segments of the educational community. It brings all Ohio educators together as partners who share a common goal.

This system-wide plan focuses on measurable improvements. Its risks are minimal and its potential unlimited. Rather than penalizing poor performance after the fact, it provides students and educators with opportunities and incentives to solve problems as they occur.

This plan is based on conclusions derived from the most complete set of data on remediation currently available, and it builds upon the gains realized from the 1981 findings of the Advisory Commission on Articulation Between Secondary Education and Ohio Colleges, as well as the recent work of the Legislative Office of Education Oversight. Like any plan, this one requires the use of resources, but it builds upon an existing foundation of activities and experiences, focuses on critical leverage points, and ensures that all investments produce a maximum impact.

Most importantly, this plan and the collaborative relationships it will create can be easily interwoven with Ohio's longer-term strategies for transforming teaching and learning and moving toward more rigorous standards, graduation requirements, and assessments that are based on what students should know and be able to do.

To meet the objective of improved college readiness among Ohio high school graduates, the Commission recommends defining a consistent set of college-level expectations, assessing K-12 students' progress toward college readiness on a regular basis, and providing immediate intervention when students are not progressing effectively.



As Ohio's educational system implements these recommendations over the next five years and beyond, schools, colleges, and universities should assess their progress toward increasing college readiness by tracking developmental enrollments among recent Ohio high school graduates and should set goals for reducing developmental enrollments among this population.

The Commission members believe that the results of their recommendations will be more effective teaching, learning, and assessment and a greater commitment to collaborative partnerships among educators in the K-12 and higher education communities. Further, the Commission members believe that these improvements will lead to a reduction of at least 15 percent in developmental enrollments at the state's two-year and four-year campuses by the year 2001—without negative impacts on access to higher education—and that success in these early years will set the pace for more rapid increases in college readiness beyond 2001.

The Commission's proposed plan includes five major recommendations that address the need to reduce developmental enrollments.

Recommendation 1: Communicate College-Level Expectations

Developmental enrollments will decrease when Ohio schools, colleges, and universities communicate a consistent set of college-level expectations to students as they develop and pursue their college preparation goals and complete the placement process.

The Commission recommends that faculty from the K-12 and higher education communities collaborate in defining and articulating what entering college freshmen should know and be able to do in order to be considered fully prepared for the mathematics, reading, and writing tasks they encounter in their first college-level courses.

In addition, the Commission recommends developing common placement guidelines and establishing a range of cutoff scores for developmental placement that can be adopted by all Ohio public higher education institutions.



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Recommendation 2: Develop a Continuum of Early Assessment and Intervention

Developmental enrollments will decrease when Ohio's educational system encourages and supports the efforts of K-12 teachers to help their students identify and address learning needs early.

The Commission recommends that the K-12 and higher education communities work together—and work with parents—to begin developing and applying a continuum of assessment and intervention strategies so that educators can pinpoint problems when they first occur and promote continuous progress toward college readiness.

The proposed assessment and intervention continuum is a significant step toward Ohio's long-term goals for improved teaching and learning but builds on strategies already in place, such as mandatory intervention for students who fail to pass the Fourth-Grade Proficiency Test and the Ohio Systemic Initiative for middle schools.

The high school segment of the proposed continuum, which the Commission believes should be Ohio's emphasis during the next five years, uses student performance on the Ohio Proficiency Tests as an entry point for assessing college readiness but also uses assessments that provide a fuller picture of college readiness. The Commission believes that appropriate assessments of progress toward college readiness can be adapted from those used in the Early Mathematics Placement Test (EMPT) and the Early English Composition Assessment Program (EECAP).

The Commission also recommends providing students who need help progressing toward college readiness with additional learning opportunities designed to accelerate their progress and address learning problems. In this way, Ohio's educational community can meet students' needs during high school instead of waiting until they enter college.



Recommendation 3: Create the Ohio "Learning Extension"

Developmental enrollments will decrease when successful teaching and learning strategies are supported and shared statewide.

The Commission recommends creating an Ohio Learning Extension that will link the ideas and knowledge of high school teachers, faculty from Ohio's colleges of education, faculty who teach entry-level college courses in arts and sciences at Ohio colleges and universities, and professional development practitioners. This collaborative program would focus on improving teaching and learning by increasing the value of the successful approaches that already exist in Ohio and by enhancing communication between K-12 and college and university faculty.

Recommendation 4: Target Existing Resources

Developmental enrollments will decrease when K-12 and college and university faculty are presented with opportunities to become partners in improving teaching and learning.

The Commission recommends creating a new funding approach that will provide incentives for schools, colleges, and universities to engage in collaborative programs that focus on college readiness and improved teaching and learning across the entire system.

Recommended funding concepts include reallocating part of the instructional subsidy attributable to developmental enrollments toward more innovative teaching and learning practices, using remediation rates as one of the criteria for performance-based K-12 funding, and providing additional monies from existing lines to stimulate collaboration and innovation.



Recommendation 5: Build a Common Agenda

Developmental enrollments will decrease when the K-12 and higher education systems work together as a total system to implement the recommendations in this report.

The Commission recommends three major steps toward creating a total educational system for Ohio:

- First, the Commission recommends gathering data to support the activities recommended in this report and linking the state's educational data and information systems to enable accurate assessment and evaluation of improvements.
- Second, the Commission recommends that the activities described in this report be linked to changes beyond 2001 that are planned for Ohio's educational system and that the K-12 and higher education communities create a joint plan that charts a common path for all education in 21st century Ohio.
- Finally, to ensure that Ohio has the leadership needed for building a common agenda, the Commission recommends that the Ohio Board of Regents and the State Board of Education appoint some of their members to a joint council to encourage ongoing dialogue, collaboration, and partnership between the K-12 and higher education communities.

The joint council would oversee the implementation of this report and would ensure partnership between K-12 and higher education in the state's educational reform efforts.



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"For too long, public education in America and higher education have gone their separate ways, each dedicated to its own vision of excellence in learning."

Richard W. Riley U.S. Secretary of Education



I. The Fundamental Problem

Part of the support that Ohio's taxpayers provide to the state's colleges and universities is used to subsidize courses for students who need help attaining college readiness. This "developmental subsidy" is a necessary investment in Ohio's future, and the mathematics, writing, reading, and study skills courses this subsidy supports bring important benefits to returning adults.

In 1995, however, the needs of returning adults accounted for only 57 percent of Ohio's \$32 million developmental subsidy. The remaining 43 percent—approximately \$13 million—was expended for students who entered college directly after high school graduation.

Ohio legislators are concerned. From an economic standpoint, they have raised two important questions:

- Should a state that funds higher education at only around 85% of the national average use its scarce higher education resources to support students who leave high school underprepared for college?
- Is Ohio paying twice for the same type of instruction—college preparatory courses in high schools and below-college-level coursework at universities and community and technical colleges?

The economic questions legislators are asking do not stem from a desire to reduce higher education expenditures or restrict access. Rather, they reflect a more fundamental concern about whether developmental courses are being assigned the wrong role in Ohio's educational environment—the role of an easy alternative to the challenge of rigorous college preparation during high school.

Note: For a discussion of terminology used in this report, see Appendix A.



The Commission's Concerns

Ohio's Secondary and Higher Education Remediation Commission (SHERAC) shares the concerns of legislators about how efficiently resources are being used and how effectively Ohio is preparing its students for the future.

The Commission was formed by Ohio's Superintendent of Public Instruction and the Chancellor of the Ohio Board of Regents to create a plan to reduce the need for remediation at Ohio's colleges and universities. Commission members agree with the spirit of the charge—that Ohio should strive to return developmental education to its original focus as an entry point for older returning students, as an equalizer for students whose academic opportunities before college were limited, and as a strategy for increasing retention and graduation rates.

The task of raising academic expectations, begun in 1981 by the Advisory Commission on Articulation Between Secondary Education and Ohio Colleges, is continued in this proposed plan. In addition, this plan responds to the difficult questions raised by the Legislative Office of Education Oversight (LOEO) in its recent report.

Minimizing Risks

Ohio needs to address the problem of underprepared college freshmen with a plan that is bold enough to reduce significantly the number of underprepared Ohio high school graduates.

But the plan must not rebuild barriers to access that Ohio has worked hard to remove. The educational attainment of older returning students, minority students, and economically disadvantaged students must not be jeopardized.

Giving all Ohioans the opportunity to realize their educational goals is essential to maintaining a competitive position in the global knowledge economy and solving the social and economic problems that threaten the well-being of all citizens.

Approaches that discourage citizens from pursuing higher education or that undermine the efforts of students to overcome social and economic disadvantages would be unfair and counter-productive. Lower educational attainment is a heavy price to pay for reduced remediation.

The Commission's proposed plan, while decreasing developmental enrollments, minimizes the risk that reductions will affect older returning students and students who already face social and economic barriers. With the proposed plan, colleges and universities would reduce developmental enrollments but would have the resources they need to maintain support for students who face barriers to access.

Most importantly, the Commission's plan responds to the core problems that create the need for colleges and universities to place students in developmental courses.

A Total System Approach

Ohio's problem of underprepared high school graduates does not belong to one part of the educational system. It is a total system problem.

Reacting to accumulated academic problems at a single point of transition is incomplete and inefficient. Shifting the burden from one part of the system to another creates division among segments of the educational system and fosters competition.

The Commission's plan is a total system approach that strengthens teaching and learning at every stage of the educational process and creates a seamless system that recognizes and addresses problems when they first occur. It is a plan that encourages all segments of the educational community to work together toward a common vision and common goal—a significant increase in college readiness among Ohio high school graduates and greater numbers of high school graduates who decide to pursue higher education.



II. New Data on Developmental Education

Data on developmental education in Ohio and nationwide is essential in accurately describing the problem addressed in this plan. As discovered by the Legislative Office of Education Oversight (LOEO), Ohio does not yet have the ability to link data about college students with data about their high school performance or to track students at different types of institutions over time.

In fact, detailed, long-term, widely representative statistics about the effectiveness of college preparatory programs and developmental programs do not exist.

However, the Commission was able to add to the data collected by the LOEO and provide a more detailed view about Ohio's developmental enrollments and attributable subsidies.

In the following discussion, the Commission responds to eleven key questions using the new data they examined.

The Commission's Data Sources

The Commission used four major sources of data to analyze current trends, costs, and impacts of developmental programs in Ohio.

- A Fall 1995 Enrollment Analysis to provide a statewide snapshot of developmental enrollments and a comparison of developmental enrollments at different types of institutions.
- A Board of Regents study that revealed general remediation trends between 1978 and 1994.
- Survey responses from institutions about their academic expectations, the placement mechanisms they use, and their experiences with developmental courses.
- Studies from the U.S. Department of Education's National Center for Educational Statistics (NCES) about the characteristics of developmental students and the impacts of developmental courses.

For additional information on the data used by the Commission, see Appendix B.



Conclusions from the Data

Following is an overview of the most important questions the Commission answered through new and existing data.

1: What percentages of Ohio's recent high school graduates need to take developmental courses in a typical year?

According to enrollment data for the Fall 1995 term, about 27 percent of the traditional age entering freshmen at Ohio's public colleges and universities (17,324 of the total 63,217 traditional age freshmen) were enrolled in at least one developmental course.

2: When compared to the rest of the U.S., does Ohio exhibit similar developmental enrollment levels?

Yes. Nationwide data from NCES suggests that Ohio is typical of the nation.

- Seventy-eight percent of all public and private American colleges and universities that enroll freshmen offer courses that they consider developmental.
- One hundred percent of all public two-year institutions offer developmental courses.
- Eighty-one percent of *public four*year institutions offer developmental courses.

A comparison of NCES data and data from Ohio's 1995 Fall term provided the following information:

- Among a representative sample of the nation's large public colleges and universities, 32 percent of entering freshmen required at least one developmental course in 1995. At Ohio's public colleges and universities, 25 percent of all entering freshmen and 27 percent of traditional age freshmen enrolled in at least one course eligible for developmental subsidy during the Fall 1995 term.
- Nationally, 39 percent of institutions reported increases in developmental enrollments and 14 percent reported decreases. In Ohio, 33 percent reported increases to the Commission and 15 percent reported decreases.



3. What is the pattern of developmental enrollment for most students?

During the Fall 1995 term, 67 percent of Ohio's underprepared traditional age freshmen were enrolled in only one developmental course, and 10 percent were enrolled in three or more (See Figure 1 opposite). This suggests that some students who received developmental assistance in one area also were enrolled in college-level courses.

4: How do developmental enrollment levels compare among different disciplines? Where is the greatest need?

During the Fall 1995 term, the 17,324 underprepared traditional age freshmen who entered Ohio public colleges and universities accounted for a total of 24,820 developmental enrollments. (There are more enrollments than students because some students took more than one developmental course.) Of these 24,820 developmental enrollments, 11,502 (or 46 percent) were in mathematics courses. (See Figure 2 opposite.) A number of experts who met with the Commission cited insufficient use of inquiry-based teaching and the need for more high school students to take mathematics courses in their senior year as major reasons that underpreparation in mathematics is so prevalent.

Another area of concern is reading. The Commission examined the enrollment patterns for courses in developmental reading during Fall 1995 and found that among students who are enrolled in developmental reading, 35 percent were enrolled in three or more developmental courses.

In Fall 1995. most of Ohio's underprepared traditional age freshmen enrolled in only one developmental course.

Three or More Courses 10%

Two Courses 23%

Number of Developmental Courses Per Underprepared Student

Source: Fall 1995 Enrollment Analysis

Figure 1

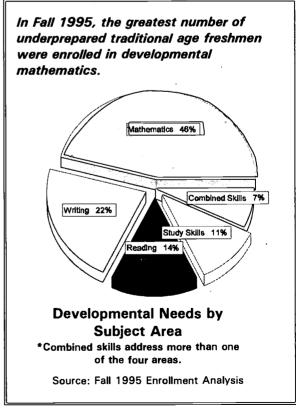


Figure 2



5: Do developmental enrollment patterns differ according to type of institution? How is developmental subsidy distributed?

Two-year campuses have been assigned a major part of the responsibility for assisting underprepared students. The data examined by the Commission indicate that two-year campuses are fulfilling this role.

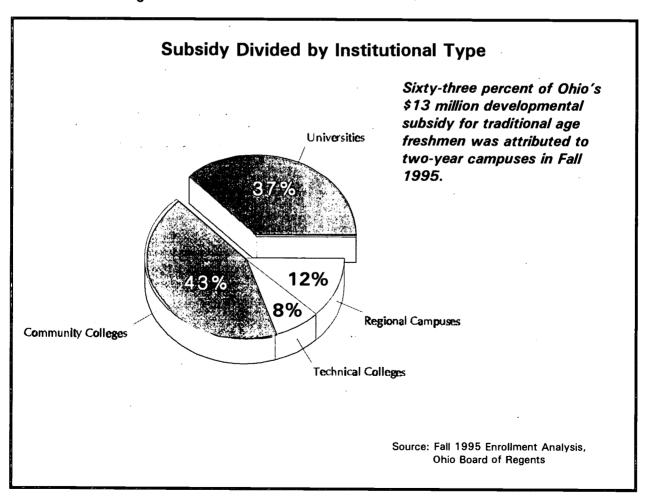
As seen in Figure 3 (below), the division of developmental subsidy by institution reveals that in 1995, the majority of Ohio's 17,364 underprepared traditional age freshmen attended two-year campuses.

6: Have developmental enrollment patterns changed in recent years?

Data collected over fifteen years suggest that the rate of remediation at universities has declined slightly since 1978 while it has doubled at community and technical colleges in the same period.

Figure 4 (next page), displays the remediation rates in mathematics among Ohio's traditional age freshmen between 1978 and 1994. Data for remediation in English shows a similar pattern: remediation has increased significantly at two-year campuses but ahs remained the same or decreased at most universities.

Figure 3





7: What methods are used to place students developmental courses? Are entry-level expectations and placement processes at Ohio campuses equivalent?

Although some high school graduates are entering higher education with academic skills that are below college level by any standard, many "underprepared" students may receive this label because of the placement systems and course expectations of the institutions they have chosen.

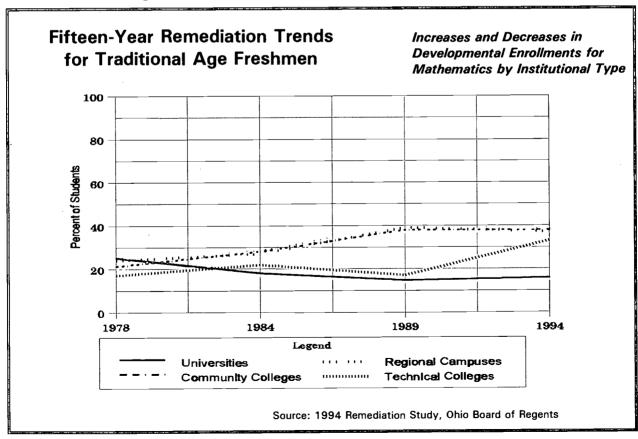
An examination of placement mechanisms and requirements illustrates the varying expectations of Ohio campuses. A recent preliminary survey by Raymond Walters College asked respondents at 25 two-year and 31 four-year public and private colleges and universities in Ohio to describe the as-

sessments they use for determining which students should be placed in developmental writing courses, as well as the cutoff score used to determine placement in developmental courses.

Initial results show that different institutions use different assessment tools for determining whether a student needs to be placed in a developmental course (See Figure 5, next page). These tools include the ACT and SAT and standardized placement tests, such as ASSET and COMPASS. At 28 percent of the institutions that responded, placement tests are developed internally. Also, a number of institutions reported augmenting their placement instruments with writing samples.

Even among institutions that use standardized mechanisms, cutoff scores used to determine developmental placement vary.

Figure 4





For example, among the institutions that reported using the ACT English score to determine writing placement, most of the cutoff scores ranged from 17 to 20. For those who used the SAT Verbal score, the cutoff ranged from 410 to 580. ASSET scores ranged from 26 to 44. Thus, a student who might be considered ready for a freshman-level writing course at some Ohio institutions would be placed in developmental writing courses at others.

8: Do all universities exhibit the same developmental enrollment patterns?

Because concerns about developmental enrollments often focus the greatest attention on universities, the Commission examined the role of Ohio's universities more closely. After reviewing national data suggesting that certain populations are typically over-represented in developmental programs, the Commission decided to conduct a separate analysis for Ohio universities to determine whether differences in their developmental enrollments align with differences in how they are expected to serve their surrounding communities and the student populations they attract.

. or ^{the}	Percentage of Institutions Using Each Placement Mechanism			
Assessments Used to Place Students	Mathematics	Writing	Reading	Study Skills
Standardized Placement Tests	33%	27%	54%	49%
Internally Developed Placement Tests	28%	29%	6%	9%
ACT	20%	20%	17%	11%
SAT	7%	7%	7%	3%
Other	8%	12%	15%	26%
Non-completion of core curriculum	3%	2%	1%	3%
Portfolio Materials	1%	3%	0%	0%
12th Grade Proficiency Test	0%	0%	0%	0%

Figure 5

Source: Data from SHERAC's survey of developmental education programs



The Commission divided Ohio's universities into two groups.

Five Ohio public universities—Bowling Green State University, Kent State University, Miami University, The Ohio State University, and Ohio University—were placed in the first group because they can be said to have a residential emphasis: they tend to attract students who wish to live on or near campus and immerse themselves in the life and culture of the university.

In the second group, the Commission placed Cleveland State University, the University of Akron, the University of Cincinnati, the University of Toledo, Wright State University, and Youngstown State University because they are located in major metropolitan areas, and they tend to attract a high percentage of students who live in surrounding urban communities.

Because of the economic realities many of their students face, these "urban" institutions place greater emphasis on supporting part-time or intermittent attendance, as well as serving older returning students, students who belong to minority groups, and students from disadvantaged economic backgrounds.

Central State University and Shawnee State University also were grouped with the urban campuses because they serve unique student populations. A major characteristic of Central State University is its focus as an historically African-American institution. Shawnee State University, because of its location, serves a large percentage of disadvantaged students from Ohio's Appalachian region.

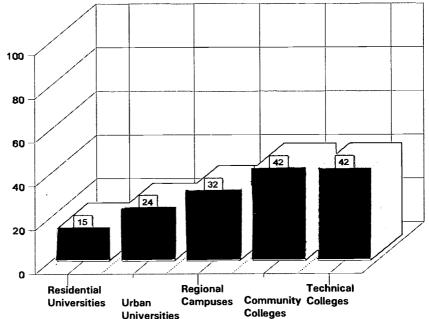
As expected, the data showed that the residential universities enroll a lower percentage of underprepared students than do urban universities (See Figure 6, below).

Figure 6

Enrollment in Developmental Courses By Institutional Type

Percentages of all traditional age freshmen who enrolled in developmental courses in at least one area

Source: Fall 1995 Enrollment Analysis, Ohio Board of Regents





As Figure 7 (below) indicates, Fall 1995 data also exhibit different degrees and types of academic needs among the students enrolled in developmental courses at urban and residential universities:

- Among urban campuses, the percentages of students enrolled in developmental reading, writing, and study skills were much higher than among residential campuses.
- Ten percent of underprepared students at urban campuses were enrolled in three or more developmental courses, compared to five percent at residential campuses.
- Among urban campuses, a greater percentage of students were enrolled in at least one reading course compared to residential campuses.
- Residential institutions enrolled the same percentage of students in developmental mathematics courses as urban institutions did—about 10 percent.

9: Are the higher developmental enrollment levels at Ohio's urban universities related to the characteristics of their student populations?

Studies on different student populations show that the student characteristics more frequently found at Ohio's urban universities tend to be associated with greater developmental needs.

According to studies reported by NCES and the *Chronicle of Higher Education*, students who belong to minority groups are more likely to be receiving developmental assistance than other students. African-Americans represent 29 percent of traditional age freshmen at Ohio's urban universities but only 13 percent at residential universities.

In addition, developmental programs at Ohio's urban universities serve higher numbers of older returning students than do residential campuses. These students often need developmental courses to refresh their knowledge.

Urban and Residential Universities: Some Important Contrasts	Urban Campuses	Residential Campuses
Traditional age freshmen enrolled in at lea one developmental course	est 24%	15%
Traditional age freshmen enrolled in three more developmental courses	or 10%	5%
Traditional age freshmen enrolled in developmental mathematics	10%	10%
Traditional age freshmen enrolled in developmental writing	11%	2%
Traditional age freshmen enrolled in developmental reading	18%	13%
Figure 7 So	ource: Fall 1995 Enrollment Analysi	s, Ohio Board of Regents



Finally, urban universities often serve economically disadvantaged students who may not have had a rich array of educational opportunities in high school and who face additional barriers to higher education because of their limited financial resources. According to NCES studies, students with low family or independent incomes (less than \$20,000 per year) tend to be over-represented in developmental courses.

10: What statements can we make about the eventual success rates of underprepared students in Ohio?

Data that provide conclusive information about the success rates of Ohio's underprepared students are still unavailable. However, longitudinal studies cited in a presentation to the Commission by Clifford Adelman of the U.S. Department of Education, as well as examination of data from the National Center for Education Statistics and other sources, provided the Commission with some national and regional data that are significant to this discussion.

Entering a college or university underprepared means added tuition costs and lost time. In addition, studies show that students who begin higher education in developmental courses tend to have lower grade point averages than those who started college fully prepared.

But NCES studies also suggest that most underprepared students remain in good standing after completing their developmental courses. Those who quit often do so for nonacademic reasons.

According to NCES studies, the success rates of students who need one developmental mathematics course and/or one writing course at four-year institutions are about the same as those of all American college and university students.

11: Can underprepared students succeed at four-year institutions?

One concern in many discussions about developmental education is whether underprepared students who enter universities will be more likely to fail or quit than their counterparts who enroll in two-year institutions.

Although NCES studies suggest that students who need developmental reading courses could increase their likelihood of graduating by beginning at two-year campuses, NCES data do not indicate that the majority of underprepared students who choose four-year institutions are decreasing their chances for success by doing so.

The National Center for Developmental Education compared estimates from a 1987 study on attrition among all university students with estimates for students who began in developmental courses at universities. The Center found a 37 percent graduation rate among students who began their university studies in developmental courses compared to a 44 percent rate for all students (See Figure 8, below). The LOEO's report included a similar graduation rate (35 percent) for underprepared students at five of Ohio's main campuses.





III. Recommendations for Increasing College Readiness

Ohio's K-12 and higher education communities should focus expertise and resources toward the goal of a significant increase in fully prepared college freshmen by the year 2001 and continued increases beyond this five-year milestone.

This increase in fully prepared freshman should be accomplished through refined teaching and counseling, dramatic improvements in learning throughout the educational system, and major increases in collaborative partnerships among educators in the K-12 and higher education communities. Improvements should be demonstrated by an overall reduction in the developmental enrollments of recent high school graduates attending Ohio's two-year and four-year campuses.

The Commission believes that if all of its recommendations are implemented, Ohio can achieve a fifteen percent reduction in developmental enrollments by 2001 and continued reductions thereafter. To convey a strong message that high school students who plan to seek baccalaureate degrees need to take greater advantage of opportunities to challenge themselves, the greatest reductions in developmental enrollments should occur at the state's four-year public institutions.

To improve the college readiness of high school graduates, the Commission recommends defining a consistent set of college-level expectations, assessing high school students' achievement as they progress toward college readiness, and providing immediate intervention to students who need to accelerate their progress or receive remedial help.

These activities would be assisted by linking the remediation goals, activities, expertise, and resources of Ohio's secondary and higher education systems though collaboration, sharing of data, and the creation of mechanisms to provide incentives for improvement.

Specific recommendations presented in this section are:

- 1. Communicate College-Level Expectations
- 2. Develop a Continuum of Early Assessment and Intervention
- 3. Create the Ohio "Learning Extension"
- 4. Target Existing Resources
- 5. Build a Common Agenda



Recommendation 1: Communicate College-Level Expectations

Communicate a consistent set of college-level expectations and placement approaches to articulate and reinforce a clear path students can follow toward college readiness.

No single definition of college readiness exists in Ohio today. High schools define readiness according to Carnegie Units, but curricula and instructional methods vary in content and rigor. Colleges and universities require more specific knowledge and skills but different institutions expect different levels of competency from entering students.

Differing expectations are reflected in the variety of placement approaches used. Colleges and universities use different methods to determine whether students need developmental assistance. Even those that use the same assessments use different cutoff scores to determine placement decisions.

The Commission recommends that Ohio colleges and universities work to adopt a common definition of college-level knowledge and skill. This definition would be reflected in statements about what all entering freshmen should know and be able to do and in the adoption of consistent placement approaches by all Ohio public colleges and universities.

Defining Expectations

The first step should be to assemble faculty from Ohio's colleges and universities and the K-12 community to develop a set of academic expectations for freshman-level mathematics, reading, and writing.

Once developed, the expectations would be the reference point for placing students in freshman-level courses at Ohio's colleges and universities and a source of information for developing future high school graduation requirements. To ensure maximum benefits, the group would create a Transition Guide for Ohio's K-12 schools that is based on the common academic expectations. The guide should be easy for teachers and students to understand. Its intent would be to provide teachers with a reference for designing curricula and instruction and to encourage high school students to take greater responsibility for their college preparation.

The educators who develop these academic expectations would link their work closely to the adoption of Ohio's proposed school standards and the development of graduation requirements.

Developing Consistent Placement Approaches

In conjunction with the common college-level expectations, the Commission recommends that colleges and universities define equivalent levels of performance among different tests and establish ranges of common cutoff scores that can be adopted by all institutions.

A working group of admissions experts, college and university faculty, and high school teachers should be selected to define equivalent levels of performance among the assessment tools most commonly used in college placement and to recommend a common range of cutoff scores for each of the most frequently used assessments. Also, the group should study the feasibility of selecting or developing a placement approach that could be used by all Ohio colleges and universities either alone or in conjunction with other placement approaches.

Colleges and universities should be encouraged to reexamine the placement mechanisms and cutoff scores they currently use, define the relationship between their expectations and their established cutoff scores for developmental placement, and ensure that their admissions standards are closely aligned with their stated functional missions, as well as clearly communicated and consistently enforced.



Benefits

Articulating college expectations and defining consistent placement approaches will help significantly reduce developmental enrollments and improve learning because:

K-12 faculty will use a common reference point when advising students and designing curriculum and instruction.

K-12 students and their parents will receive a more consistent message from Ohio institutions about the importance of completing and exceeding the recommended core curriculum.

High school students will know the entry-level expectations of the institution in which they plan to enroll.

The development of new standards and graduation requirements for Ohio schools will be based on an accurate assessment of college-level expectations.

Colleges and universities will have a common baseline for setting admissions standards.

College expectations and K-12 student achievement will rise together.

Recommendation 2: Develop a Continuum of Early Assessment and Intervention

Begin promoting college readiness early in the educational process.

Many students discover they are underprepared for college-level study only after failing the 12th Grade Proficiency Test or receiving low ACT scores during their senior year of high school. Discovering academic needs in the middle of the 12th grade or later leaves these students few opportunities to address their needs or to reevaluate their educational plans.

When high school students are identified as underprepared in their senior year, it is too late for them to retrace their steps and complete all the coursework that would have prepared them for college-level study or to acquire all of the knowledge and skills they would have gained through three years of full engagement and steady challenge. For these students, developmental courses become the only solution.

Therefore, the Commission recommends that the K-12 and higher education communities work together—and work with parents—to create and apply a continuum of assessment and intervention strategies that pinpoints problems when they first occur and promotes continuous progress toward college readiness. Although a total system continuum is the ultimate goal, the initial focus would be on expanding assessment and intervention during the high school years.



The Total System Approach

Potential elements of an assessment and intervention continuum already exist. They include the Ohio Proficiency Tests and mandatory intervention for fourth grade students, programs in some middle and junior high schools that are improving teaching and learning, and early college assessment programs in some high schools.

Because these existing assessment and intervention strategies are important to the college readiness of students, the K-12 community should continue to apply and strengthen them. However, additional strategies are needed, particularly as high school students begin to make decisions about and prepare for careers and higher education.

The Commission recommends that Ohio begin creating the proposed total system continuum with an initial emphasis on grades 9 through 12, including the summer after high school graduation (See Figure 9).

Grade 9: In the first phase of creating the continuum, the transition from eighth grade into ninth grade should be considered the point of engagement for college preparation.

Students who do not pass every section of the Ninth Grade Proficiency Test by the end of eighth grade, when it is first administered, would be required to begin a series of learning activities that complements the existing curriculum and addresses the difficulties they are having.

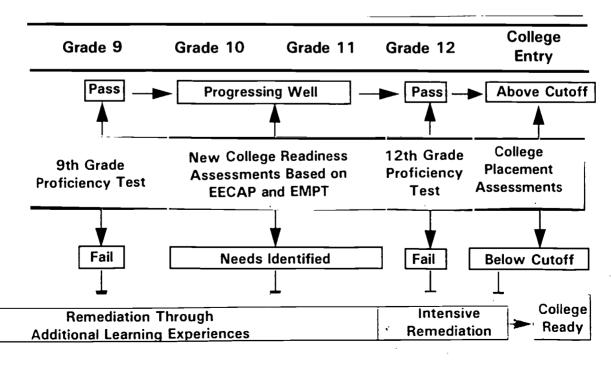
Grades 10-12: In tenth grade, students would begin participating in periodic pre-college assessment activities as part of their English and mathematics coursework.

Teachers and guidance counselors could use the assessment results to encourage students to select more challenging courses and to match students with learning activities designed to help them acquire more effective learning strategies. Students and their parents could use the assessments to plan and evaluate progress toward higher education and career goals.

Figure 9

Assessment and Intervention Continuum, (1997-2001):

Focus on Grade 9 Through College Entry





With the help of parents, all students would be strongly encouraged to select challenging courses designed to prepare them for college. In particular, students and parents would be made aware of the need for at least three years of mathematics courses beginning with algebra and for a mathematics course during the senior year.

When assessments identify students who need to accelerate their progress, those students would be encouraged to continue participating in challenging courses but also would be provided with specially designed learning activities to help them succeed in those courses.

Grade 12 - Freshman Year: Students in Grades 10 and 11 would engage in a number of pre-college assessments that are integrated with instruction. Using these pre-college assessments, students could identify areas where they need to accelerate their progress toward college readiness.

Results of the Twelfth-Grade Proficiency Test, which is designed to reflect the knowledge of a typical twelfth grade student, would be used to identify students who need more intensive assistance and effort in preparing for college. Results of other tests appropriate for college admissions and placement, such as ACT and SAT, would be used to gain a more complete picture of student progress.

Based on the results of these various assessments, students could take advantage of intensive learning activities that extend through the summer preceding college entrance. Placement mechanisms would still be used when students enter colleges and universities.

When deciding whether to admit an underprepared high school graduate, colleges and universities would be encouraged to examine information about a student's participation in available assessment and learning activities.

Assessment of College Readiness

The Ninth- and Twelfth-Grade Proficiency Tests would be used to gain a partial picture of how well students are progressing toward college readiness. However, assessments that are more closely linked to instruction and that provide more accurate measures of more advanced knowledge and skills also are needed.

The Early Mathematics Placement Test (EMPT) program and the Early English Composition Assessment Program (EECAP) are two potential focal points for these more advanced assessments.

In addition to continuing support for existing EMPT and EECAP sites, the Commission proposes that the Ohio Board of Regents (OBR) and the Ohio Department of Education (ODE) take the following steps:

- 1. Phase in the Early Mathematics Placement Test and the Early English Composition Assessment Program in the state's urban districts. Encourage high school and higher education faculty to work with urban districts in modifying the two programs so they can be expanded and used earlier or in piloting new approaches to assessing college readiness that use successful elements of EECAP and EMPT.
- 2. Encourage EMPT and EECAP participants to collaborate with one another in improving the two programs and making them more cost-effective. In particular, enhance the professional development component of EMPT and the quantitative measurement methods used in EECAP.
- 3. Develop a plan for cost-effective statewide use of pre-college assessment approaches that offer the benefits of EMPT and EECAP. Include a timeline for phasing in these approaches.

Consideration also should be given to new assessment and intervention strategies in the area of foreign languages.



High School Interventions

The new learning experiences available to high school students could include home study modules that use books, audio and videotapes, computer-assisted instruction, or televised courses; in-school programs (to be pursued during free periods) that may consist of tutoring sessions, organized study groups, or learning laboratory activities; and after-school, weekend, and summer programs held at the school, a library or community center, or a nearby college or university campus.

The groundwork for these learning experiences already exists. A number of highly effective strategies for improving college preparation have been developed by Ohio educators and used successfully on a small scale. Through collaborative partnerships, technology, and a realignment of existing resources, these activities would be distributed statewide.

Benefits

The Continuum will significantly reduce developmental enrollments and improve learning because:

High school students and graduates will have a more accurate idea of their academic strengths and weaknesses.

Students in high schools with scarce resources will have additional learning opportunities.

K-12 students will have more opportunities to pursue ongoing improvement so they can enter college better prepared.

Higher education and high school faculty will co-develop effective teaching and learning approaches.

Recommendation 3 Create the Ohio "Learning Extension"

Support and share successful teaching and learning strategies through a collaborative Learning Extension.

Improving the learning experience for all students is the most effective way to ensure that high school graduates are prepared for college and that they continue to learn effectively after entering college. The Commission recommends creating a collaborative "Learning Extension" program that would connect Ohio colleges and universities, Regional Professional Development Centers, and high schools.

The proposed collaborative—which would combine the expertise of high school teachers, faculty from Ohio's colleges of education, faculty who teach entry-level college courses in arts and sciences at Ohio colleges and universities, and professional development practitioners—would provide support for best practices and technical assistance to educators throughout Ohio.

Funding

The Ohio Learning Extension program would be subsidized from the pool of available resources through competitively driven operating grants. These grants would be provided annually to partnerships between public high schools, colleges, and universities.

Partnerships that also include private high schools, public or private K-8 schools, private colleges and universities, and businesses also would be encouraged.

Partial support for the Ohio Learning Extension could come from the Board of Regents' proposed School Challenge funding, which would provide competitive or needbased grants for collaborative arrangements between school districts and universities. The effectiveness of individual Learning Extension projects would be measured and would determine continued funding.



In the course of its research, this Commission reviewed information about a number of excellent collaborative programs and initiatives for improving teaching and learning. The Learning Extension concept would be focused on promoting strategies that have been successful in improving teaching and learning, especially in the area of mathematics.

The Commission suggests the following as potential activities for the Ohio Learning Extension:

- Expand the Ohio Systemic Initiative (formerly Discovery) from middle and junior high schools to high schools and help replicate the program across the state.
- Support the Tech Prep program's goal of enrolling 15 percent of Ohio's juniors and seniors by the year 2000.
- Build upon collaborative strategies, such as the School and Higher Education Partnership and the Partnership for a Diversified Teaching Force.
- Increase the participation of schools, colleges, and universities in the Eisenhower program through dissemination and expansion of successful activities.
- Link colleges and universities, Regional Professional Development Centers, and K-12 schools in a statewide network for sharing assessment strategies and best practices.
- Create collaborative linkages between educational organizations and business and industry groups, such as Ohio's BEST organization.

Note: For further information on programs and activities listed above, see Appendix C.

Benefits

The Ohio Learning Extension will help significantly reduce developmental enrollments and improve learning because:

The partnerships it creates between the K-12 and higher education communities will strengthen the proposed continuum of assessment and intervention strategies.

The dissemination and use of best practices will increase, resulting in improved teaching and learning.

Success and accountability will be shared equally.

In addition,

The Ohio Learning Extension will help improve undergraduate teaching and learning at Ohio colleges and universities.



Recommendation 4: Target Existing Resources

Target a percentage of each year's developmental subsidy, along with matching funds from other sources, toward collaborative programs that focus on college readiness and improved teaching and learning.

The Commission recommends providing an incentive for Ohio colleges and universities to reduce their reliance on developmental course offerings and increase their engagement with K-12 partnerships that focus on preventing the need for remediation. The proposed incentive, which would go into effect in the 1998 academic year, would provide the opportunity for institutions to move from a problem focus to a solution focus.

To support the total system approach, the Board of Regents should enable campuses to target a portion of the funding currently used for developmental courses, and the Department of Education should target a portion of its resources toward active approaches, such as:

- Working to enhance and expand the Early English Composition Assessment Program (EECAP) and the Early Mathematics Placement Test (EMPT).
- Using technology, both in the classroom and via distance learning modes, to share courses and other resources that address college readiness, as well as to disseminate new teaching approaches among K-12 and higher education faculty. SchoolNet has enabled a number of Ohio schools to be wired for this purpose, but there are, to date, no provisions to link K-12 and higher education settings.

- Sponsoring summer institutes operated by high school and higher education faculty to provide sustained opportunities for students who need to improve their mathematics, reading, writing, and study skills.
- Contributing to a continuum of developmental opportunities for students throughout the high school years, including the summer after graduation and first year of college. Participation could include providing developmental education materials and expertise to high schools or adapting existing curricula, instructional strategies, and materials to this purpose.
- Developing strategies that contribute to reduced developmental enrollments by improving college teaching and learning in the crucial freshman year. These strategies may include approaches that enable some underprepared students to enroll in college-level courses instead of developmental courses, relying on tutoring and other assistance to help them succeed.



Funding Incentives

To provide the opportunity for higher education to shift the emphasis away from developmental courses and toward activities to improve college readiness, and for high schools to be partners in this endeavor, the Commission recommends the following funding strategies:

- Enable each institution to reallocate a percentage of its portion of the instructional subsidy attributable to enrollments in developmental courses to be targeted for collaborative programs that enhance teaching and learning for students in secondary and higher education. As a result, institutions that reduce developmental enrollments will not be penalized by a reduction in their instructional subsidy.
- Provide each institution with a state match that equals the amount reallocated to college readiness activities. A portion of the Board of Regents' proposed School Challenge Program could be used for this purpose.
- Provide funding from the Ohio
 Department of Education to schools
 that participate with colleges and
 universities in collaborative projects to
 improve the college readiness of Ohio
 high school graduates. This funding
 should equal the reallocation of
 developmental subsidy and the state
 match.
- Include remediation rates as one of the performance criteria in the new Standards for Ohio's Schools, which are scheduled to go into effect by June 1, 1998.

The targeting of portions of the developmental subsidy and other resources for college readiness activities should be phased in over a five-year period and should use as the starting point each institution's 1995 developmental enrollments by traditional age freshmen. (Adjustments should be made if total enrollment increases or decreases significantly.)

With the collective goal of a 15 percent decrease in developmental enrollments by 2001, each institution should set goals for reducing developmental enrollments over the next five years by increasing efforts to improve teaching and learning at both the K-12 and college level.

Establishing a 15 percent statewide goal and specific institutional goals notifies students and schools that achievement of college readiness is expected to occur prior to entering institutions of higher education.

The Commission believes that the statewide goal can be met by adopting the following guidelines:

- University main campuses with a residential emphasis should set a five-year goal to reduce developmental enrollments by 40 percent.
- University main campuses with a significant commitment to access for older students and students who face social and economic barriers to higher education should set a five-year goal to reduce developmental enrollments by 30 percent.
- Two-year campuses should set a fiveyear goal to reduce developmental enrollments by 10 percent.



Incidences in which the five-year goals are not reached may require new funding mechanisms or service agreements between the two sectors.

The Commission recommends that the Board of Regents and the Department of Education examine the incentive concepts it has outlined and create guidelines for redirecting existing funding, together with support from new lines, to achieve a true systems approach.

In addition, implementing these recommendations will likely occasion changes to existing agency guidelines and rules and may also require legislation.

Benefits

Targeting existing funds would significantly reduce developmental enrollments and improve learning because:

Ohio campuses and schools would have incentives for decreasing developmental enrollments.

Each year, the savings achieved through reduced developmental enrollments, plus the state and Department of Education match, would be invested in collaborative programs for improving college readiness.

The total system would be making the statement that high school students who intend to apply for admission need to be prepared.

Continuation of this strategy over the long term should result in continued reductions in developmental enrollments among traditional age students and higher college enrollments.



Some Scenarios

How Might Funding Incentives Be Used to Reduce Developmental Enrollments Positively?

During the next five years, the Commission members hope to see a variety of responses to the proposed challenge of reducing developmental enrollments by improving college readiness. The most positive outcome would be for each Ohio college and university to adopt an approach that complements its institutional mission and goals and gains full value from its unique strengths and those of its K-12 partners and surrounding community.

Following are some hypothetical scenarios that would reduce developmental enrollments and improve college preparation:

A Distance Learning Mathematics Collaborative

Mathematics faculty at a residential university, its regional campuses, a technical college, and several Ohio high schools form a distributed learning collaborative to improve mathematics skills. Using the inquiry-based, interactive approaches proven effective by the Ohio Systemic Initiative (formerly Discovery), each participant develops and teaches an innovative lesson that is based on a fundamental topic students often find difficult. The lessons are broadcast at different times and days during a term and students are able to interact with the instructor.

In addition, Ohio Learning Extension Agents at each of the participating high schools work through the Eisenhower Clearinghouse to distribute taped versions of these lessons, along with other course materials, to educators throughout Ohio.

A Summer Institute

A university and its regional campuses join with several of the region's high schools and middle schools to create a summer institute for students who need help in their progress toward college readiness.

Most courses are team taught by university and high school faculty members. Students receive individual attention and are exposed to opportunities that will increase their enthusiasm about college.

One segment of the institute offers intensive courses to seniors and recent high school graduates for a modest tuition. Tuition is reimbursed for students who complete these courses fully prepared for college.

A Joint Reading Facility

Based on research suggesting that reading is critical to college success, a university main campus, and several school districts in the same vicinity pool their resources to create a fully equipped and staffed reading center located at the community college campus, as well as a computer-based reading course that is based on the latest research in a number of disciplines and is modular so that students can begin at the appropriate reading level.

Both campuses and the participating high schools offer the course to students who need it. Students based at any of these locations can use the reading center, which has evening and weekend hours. Education stu-

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dents from the university complete some of their course requirements by tutoring students in reading. High school and college faculty supervise and mentor these future teachers.

In addition, students and faculty representing each member of the collaborative work together to create a multimedia version of the course, which collaborative members make available to their students and successfully market to several local manufacturing firms.

A Writing Collaborative

A two-year community college, a university main campus, and several high schools, all located in a major urban center create a collaborative approach to improving writing skills.

Two high school teachers serving as Ohio Learning Extension Agents work extensively with faculty at the university's college of education, faculty who teach college composition from each of the three campuses, and a number of language arts faculty from each high school, to create a writing program for students who need additional help with their writing.

The program is built around the methods used in the Early English Composition Assessment program but also includes a new component for grades 8 and 9, a number of workshops held at the university, and additional coaching services provided by the community college.



Recommendation 5: Build a Common Agenda

Support development of a total system approach by creating new linkages between the data collection, long-term planning, and leadership of the K-12 and higher education communities.

The efforts described in the previous recommendations require strong partnership between the K-12 and higher education communities. This partnership must be based on a common agenda of both short-and long-term goals and shared responsibility for continually assessing progress toward those goals. It is a partnership that must exist at an individual level, as well as in the activities and structures of both systems.

Common Data Collection

As new strategies for improving college preparation are implemented, measurements of the resulting improvements will be needed. The Commission recommends that the Department of Education and the Board of Regents jointly develop information system capabilities for detailed reporting on the results of pre-collegiate and developmental programs. A shared database containing a record of each student's performance on the 12th Grade Proficiency Test should be one information source provided through this system.

The system should be able to generate information for the following analyses:

- Determining the accuracy of new assessment strategies in predicting college readiness.
- Assessing the effectiveness of programs developed through the Ohio Learning Extension in improving college readiness.
- Tracking the performance of the collaborative pre-college programs resulting from the new funding incentives.

- Determining each institution's reductions in developmental enrollments.
- Determining each high school's remediation rates.
- Determining the relationship between student performance on the Twelfth Grade Proficiency Test and placement in developmental or college-level courses.
- Determining the effectiveness of developmental courses.

The information obtained through this new system, particularly the remediation trends of individual high schools and campuses, should be reported regularly to Ohio's taxpayers.

A Total System Plan

Each of the recommendations described in this plan must support the state's longer-term goals of raising expectations for all students and preparing students for the challenges of higher education and careers for beyond 2001.

Therefore, the Commission recommends that the K-12 and higher education communities create a joint plan that charts a common path for all education in 21st century Ohio.

The plan should be developed to ensure continued reductions in the need for developmental education, higher K-12 retention, increased graduation rates, more collegebound students, and more students who succeed in the workplace.

The plan should include:

- Shared expectations
- Core academic competencies
- A comprehensive measurement and assessment system
- An incentive plan to encourage students to pursue more challenging coursework.
- A technical delivery system



Beyond 2001

The Commission's objectives for 2001 and beyond complement an ongoing process of educational reform in Ohio that will open the doors of opportunity to all Ohio students—whether they plan to enter higher education or the work force after high school graduation.

As educators adopt these reforms, Ohio will need a plan developed jointly by the K-12 and higher education communities for meeting several challenges:

- Creating an educational system that enables a continuous flow of learning experiences for each student.
- Helping each student master a core of competencies—knowledge and skills that link directly to challenging academic and career goals, that support the learner's talents and interests, and that correspond to needs that exist in Ohio and the larger society.
- Giving students an array of opportunities to pursue core competencies and advanced competencies in different ways.
- Requiring that all learners demonstrate mastery by performing challenging tasks.
- Helping students ensure that they have as many options as possible as they reach key decision points.
- Creating a system that provides incentives for excellence.

If Ohio works aggressively toward this vision and rapidly advances the total system approach recommended in this plan, reduced remediation levels will be just one feature of a much more significant change—a change to a more efficient, effective educational system that is prepared to meet the challenges of the 21st century.

Note: The educational reform efforts of four other states are described in Appendix D.

A Joint Council

To ensure that the two systems support, recognize, and reward collaboration, the Commission recommends that the Ohio Board of Regents and the State Board of Education appoint some of their members to form a joint council.

This joint council of Regents and State Board members would be responsible for creating a common agenda for the two boards, establishing collaborative working groups to carry out the recommendations in this report, encouraging dialogue among educators, supporting joint professional development opportunities for K-12 and higher education faculty, and ensuring that both systems contribute to long-term educational reform efforts. Commission members would conduct periodic reviews of progress with their full boards.

The joint council would oversee the implementation of this report beginning in 1997 with the following activities:

- Work with the Faculty Subcommittee of Ohio's Articulation and Transfer Council and others to create a group of faculty from Ohio's colleges and universities and from the K-12 community that will establish common academic expectations for freshman-level mathematics, reading, and writing.
- Select and oversee a working group that will develop a statewide improvement and implementation plan for EMPT and EECAP.
- Create a working group of admissions experts, college and university faculty, and high school teachers to develop a set of common placement mechanisms and establish common ranges of cutoff scores for all Ohio colleges and universities.
- Select participants in the Ohio Learning Extension Program and evaluate the program's progress.



- Work with the Ohio Department of Education and the Ohio Board of Regents to develop the funding incentives proposed in Recommendation 4.
- Create a working group to develop the proposed joint plan and to maintain active links to the state's long-term educational reform efforts.

Benefits

A common agenda, created through shared data collection, collaborative development of a joint plan, and the creation of a joint council, will contribute to significantly reduced developmental enrollments because:

Successful programs and strategies will be identified, supported, and possibly replicated.

Higher education will be involved in defining what 21st century high school students are expected to know and be able to do.

Educators in Ohio will be better able to speak with a common voice.

Ohio's intention to pursue collaboration will be clearly communicated.

Some Closing Thoughts

It is important to view the five recommendations in this plan as one total system approach. Each recommendation increases its value through the activities described in the other four.

Recommendation 1: Communicating common college-level expectations sends a message that will motivate students to take college preparation more seriously. Additional assessments and learning experiences, the improvements created by the Learning Extension, and the college readiness programs will reinforce that message and ensure that as students become more motivated, they will get the help they seek.

Recommendation 2: Developing a Continuum of Assessment and Evaluation will help not only students seeking improved college readiness but also high schools, colleges, and universities seeking ways to implement their strategies and measure the success of their approaches.

Recommendation 3: Creating an Ohio Learning Extension will result in a major connecting point that stimulates dialogue about expectations and ensures that effective strategies are shared and opportunities for K-12 and higher education to collaborate are cultivated.

Recommendation 4: Targeting resources and providing incentives for reducing developmental enrollments will create an environment in which participating in the Learning Extension, developing new assessment or intervention approaches, and sharing resources will be rewarded.

Recommendation 5: Building a common agenda is essential. Connecting data systems will help create a common definition of success and allow success to be measured. The joint plan will foster shared responsibility.

The collaborative leadership provided by the Joint Council will strengthen the grass roots collaboration of the Ohio Learning Extension. Similarly, the Learning Extension will be an ideal link between the two boards and the larger educational community.



IV. Appendices

Appendix A: Definitions

In discussing the important issues in this report, differing interpretations of terms can easily become a barrier to understanding. Following is a list of key terms as interpreted by the Commission.

Underprepared: Underprepared students are not yet ready to do college work in one or more basic areas, usually mathematics, reading, or writing.

College Readiness: Students possess college readiness when they are fully prepared academically for freshman-level courses in mathematics and writing and possess the reading and study skills needed to succeed in any college-level general education course.

Traditional Age Freshmen: Students who have been out of high school for one year or less.

Remediation—Remedial Work: When used in this report, these terms are referring to one form of remediation: placing students who, for varying reasons, are not fully prepared for general college-level work into courses designed to meet their needs.

Developmental Education or Courses: Developmental education is an approach to meeting the needs of students in higher education who need help in mastering content and processes needed to succeed. Students in developmental courses learn not only content but also effective strategies for thinking, learning, reading, writing, and problem-solving.

In this report, *developmental* is used to describe mathematics, reading, writing, and study skills courses that the state considers eligible for developmental subsidy.

Developmental Subsidy: The developmental subsidy is the amount of funding the state provides each institution according to the number of credit hours attributed to students enrolled in developmental courses.

Developmental Enrollments: Developmental enrollments are the number of students enrolled in each developmental course. (One student may account for two or three developmental enrollments.)

Urban and Residential Campuses: These two terms are used in this report to reflect variations in emphasis and student populations among university main campuses in Ohio.



Appendix B: More on the Commission's Data Sources

Fall 1995 Enrollment Analysis

The Ohio Board of Regents provided detailed data on the number of students enrolled in developmental courses and the use of instructional subsidy by all institutions for the Fall 1995 term. (Until 1996, developmental subsidy for Fall through Spring was calculated using Fall enrollment figures.) Although it would have been preferable to examine data collected over several years, some patterns can be seen in this "snapshot."

The Commission examined data in the following areas:

Enrollments and Subsidy: Total developmental enrollments and developmental subsidy were calculated for Ohio as a whole and for five types of institutions: residential universities, urban universities, regional university campuses, community colleges, and technical colleges. Data indicated that:

- Nearly three quarters of all estimated developmental subsidy earnings were attributed to two-year campuses.
- Developmental enrollments for residential universities are much lower than for urban universities.

Age: The analysis also was broken down by age. Data for traditional age freshmen (students who had been out of high school for one year or less) were examined separately. All other freshmen were considered non-traditional age.

Compared to Ohio's 17,324 underprepared traditional age freshmen, a greater number of non-traditional age freshmen (21,096) were enrolled in developmental courses. However, the analysis showed that the percentage of developmental enrollments was higher among traditional age freshmen than among non-traditional age freshmen (27% vs. 22%).

Number of Courses: The number of

students enrolled in one, two, and three or more developmental courses during the Fall term was calculated. This analysis suggested that some underprepared students at all institutions enrolled in a mixture of developmental and college-level courses.

Subject Area: Developmental enrollments in each of the four subject areas supported by the developmental subsidy: mathematics, reading, writing, and study skills were calculated. (About 7 percent of developmental courses eligible for this subsidy belonged in more than one of the four subject areas.)

This analysis provided the following information:

- The greatest percentage of underprepared traditional age freshmen at all institutions were enrolled in developmental mathematics courses.
- Traditional age freshmen at urban universities (including Shawnee State and Central State) are more likely to need developmental reading and writing courses than their counterparts at residential universities.
- Only 2% of traditional age freshmen statewide were enrolled in developmental reading courses. The percentages of traditional age freshmen in developmental reading were highest at urban universities and technical colleges. Percentages were about the same at residential universities and community colleges.
- Students enrolled in developmental reading courses were about twice as likely to be enrolled in other types of developmental courses at the same time.



Long-Term Enrollment Data

A 1993-94 Board of Regents Study entitled "College and University Remedial Course Enrollments in Mathematics and English" provides some general data on remediation trends in mathematics and English for recent high school graduates between 1978 and 1994.

This annual study indicated that the percentages of Ohio's recent high school graduates who required remediation in mathematics and English have remained about the same at four-year institutions but have doubled at two-year institutions.

Surveys by the Commission

Commission subcommittees conducted two surveys of higher education institutions and received a 100 percent response.

The first survey requested that institutions provide information on placement procedures. Results provided the following information:

- Almost all entering freshmen participate in a placement process. At fouryear institutions between 97 and 98 percent participate.
- Approximately 40 percent of Ohio campuses place students using standardized tests and about 20 percent using internally developed tests. The rest use an array of other tools.
- Fifty-two percent of Ohio campuses reported that developmental enrollments have remained the same during the past five years. Thirty-three percent reported increases and fifteen percent, decreases. (This data would have been more informative if percentages, rather than enrollments, had been requested.)

 Most institutions have begun to gather data on the performance of developmental students.

A second Subcommittee surveyed mathematics faculty for information on their expectations and the results of developmental courses. A large set of course descriptions and syllabi were provided for future use.

A subcommittee member also shared preliminary results from a survey by Raymond Walters College on placement mechanisms and cutoff scores in writing placements at both public and private colleges and universities. The results suggest that there are significant differences in the level of performance different institutions require for placement in their college-level writing courses.

National Center for Education Statistics

The National Center for Educational Statistics (NCES) provided data from a number of longitudinal studies of developmental students nationwide and for students in the East-North-Central region (Ohio, Michigan, Illinois, Wisconsin, and Minnesota.)

NCES data allow comparison on a national scale and provide the most complete information about long-term effects of developmental courses.

The most significant NCES studies cited in this report are as follows:

Statistical Analysis of Remedial Education at Higher Education Institutions in Fall 1995. This analysis was designed to provide current national estimates about the extent of remediation on college and university campuses.

The 1992-93 National Post-Secondary Student Aid Study (NPSAS). This study examined the characteristics of students who take developmental courses.



Other Studies Cited

National Study of Developmental Education. The Commission referred to literature reviewed as part of this major study, which was funded by the Exxon Education Foundation and conducted by the National Center for Developmental Education. The study examined the impacts of developmental education programs on student success and also provided information on minority retention.

Chronicle of Higher Education Almanac Issue. This source provided information on grades, retention, and graduation of students enrolled in developmental courses, as well as on minority retention.

Remedial and Developmental Programs in Ohio's Colleges and Universities. This report by Ohio's Legislative Office of Education Oversight helped to frame the issues studied by the Commission.

Report: Advisory Commission on Articulation Between Secondary Education and Ohio Colleges. This 1981 report documented Ohio's first major effort to address remediation and resulted in a recommended core curriculum for college-bound students. This report informed the Commission's discussion of academic expectations in Ohio.

Forum and Interviews on Remediation

Several teachers, counselors, and students from high schools in the Dayton area, two students from Miami University, and several faculty from Wright State University and The University of Dayton met with Department of Education consultants at Kettering Fairmont High School. They conducted a candid dialogue from a variety of perspectives about the influences that shape students' academic decisions and success.

Also, four students enrolled in a developmental reading course and students in a developmental writing class, at Kent State University's Stark Campus, provided insights about their high school experiences.

Appendix C: Building on Ohio's Existing Strengths

Ohio's current educational system has a number of powerful resources and ongoing initiatives for improving student achievement. In addition, education in Ohio is taking some new, innovative directions.

It is essential that a proposed plan for increasing college readiness among high school graduates uses these strengths effectively and enhances them whenever possible.

Described below are some of the programs cited in this plan, as well as other programs and initiatives that would help significantly reduce remediation by enhancing teaching and learning.

Ohio's Standards

The essential improvement foundation needed for the success of this plan consists of more rigorous standards. Ohio is already making progress in this area.

Standards for Ohio's Schools, proposed by the Ohio Department of Education and the State Board of Education, will be the foundation for a system of K-12 education that expects high performance from all learners. The proposed standards will be the foundation for a competency-based system that validates what high school graduates know and are able to do.

The Commission's proposed approach will result in greater collaboration by the higher education system in defining the competencies to be required in the new system.

Ohio's Teacher Education and Licensure Standards: A major step toward more effective teaching and learning, these new standards emphasize the need to understand the developmental stages that characterize learners.



Licensure areas are now aligned with developmental stages, including the transition from adolescence to young adulthood, and they recognize a need for new expertise in the area of intervention. They also include opportunities for entry year professional development and continued assessment.

Use of Existing Assessments

College Admissions and Placement: The Commission has focused on enhancing the use of tests that are already commonly used in college placement instead of recommending use of the Twelfth Grade Proficiency Test, which was not developed to be used as a college admissions tool.

The Ninth Grade Proficiency Test: This test, already a major focus for intervention activities, would be a starting point for early identification of students who need additional help preparing for college.

The Early English Composition Assessment Program (EECAP): EECAP, which is funded by the Ohio Board of Regents, provides grants to college and university English departments that work with high school English teachers in the teaching and evaluation of student writing. EECAP provides a model for collaboration between K-12 and higher education faculty and a basis for early writing assessments, improved teaching of writing, and stronger intervention strategies.

The Early Mathematics Placement Test (EMPT): EMPT, funded by the Board of Regents, has shown promising results in reducing developmental placements by making high school juniors more aware of the need to select higher level mathematics courses, especially in the senior year. EMPT can be a starting point for the assessments that will be used to identify needed intervention in mathematics.

Enhanced Teaching and Learning

With the Commission's plan, successful approaches to instruction and the expertise of Ohio's colleges of education and professional development community would be used more fully.

Faculty Expertise: Ohio high school and higher education faculty will play a central role in defining common expectations. In addition, the Commission's plan to channel resources into a collaborative "Learning Extension" program would provide a strong incentive for collaboration and a common focus for faculty from high schools, colleges, and universities.

Programs and capabilities that would play a role in the Ohio Learning Extension Program are described below.

Ohio Systemic Initiative (formerly Discovery): This statewide systemic program supports efforts to use new research-validated models in mathematics and science instruction. Ohio's high rate of enrollment in developmental mathematics may be partially addressed by this initiative's strong emphasis on inquiry-based instruction in mathematics—supported by the use of technology and new approaches to assessment and evaluation.

The Tech Prep Program: Continuing to strengthen the Tech Prep program would reduce developmental enrollments by enhancing the mathematical, science and communication skills of students who plan to enter two-year technology-based programs and by challenging students who do not fit the traditional academic profile of the "college prep student." The Tech Prep Consortia are collaborative partnerships that connect secondary education, higher education, business, industry, and labor. They are models for collaborative efforts to develop competencies.



The Eisenhower Professional Development Program: The Eisenhower Program could provide the professional development focus that will be needed in creating the Ohio Learning Extension. It is a federally funded program for improving the skills of teachers and the quality of instruction in mathematics and science at public and private elementary and secondary schools. Partnerships can use funding from the Eisenhower Program in creating collaborative efforts for improving mathematics and science instruction.

Ohio's School/Higher Education Partnerships: Ohio Learning Extension partnerships could be built upon these collaborative partnerships, which have been established to strengthen teacher education programs in K-12 education.

Ohio's Project for Diversified Teaching: This project, a collaborative effort between K-12 and higher education to recruit members of under-represented groups into the teaching profession, also could be enhanced by the Ohio Learning Extension.

SchoolNet: Communications and distance learning technologies are vital to the teaching, learning, intervention, and collaboration components of the Commission's plan. The Ohio Learning Extension could promote use of SchoolNet technologies for both the creation and the dissemination of effective teaching and learning strategies.

Ohio's Urban Schools Initiative: This initiative's major goals include raising expectations, fostering innovation, improving facilities, promoting shared responsibility, and creating both local and state-level communities of collaboration in urban school districts. Meeting these goals would decrease the number of underprepared graduates from Ohio's urban schools.

The Appalachian Rural Systemic Initiative (ARSI): This five-state collaborative effort between the K-12 and higher education communities aims to improve the scientific and mathematical achievement of students in Ohio's economically disadvantaged rural regions through new technology and teaching approaches. This initiative would decrease the number of underprepared graduates from Ohio's rural schools.

The Technology in Education Collaboration Link (TECLink): This framework recommended by the state's Technology in Education Committee, could provide a mechanism for coordinating professional development for K-12 and higher education faculty in the area of technology in education.

New Roles for Higher Education Faculty: Ohio's colleges and universities have committed to redefining scholarship by placing a greater emphasis on quality teaching, particularly for undergraduates. The Commission's plan provides several avenues and incentives that will enable college faculty to explore new teaching and learning strategies and collaborate with K-12 faculty in developing innovative new methods.

High Performance Campuses

Ohio's public colleges and universities are implementing a *Master Plan for Higher Education*. The Plan represents a major commitment to creating a network of high performance campuses to provide an array of complementary strengths, emphases, and learning environments to Ohio's citizens.

The Commission's plan recognizes the strength to be gained from the commitment of community and technical colleges to access and workforce enhancement, as well as from the diverse functional missions of Ohio's 13 public universities.



Specifically, it recognizes the commitment some Ohio universities have made to serving older returning adults and graduates of Ohio's urban and rural high schools, which are often poorly funded and lacking in advanced academic courses.

Also, it recognizes that some institutions play a vital role in increasing the number of Ohio's African-American college graduates.

Appendix D: Experiences of Other States

Although Ohio should have a system that reflects the characteristics of its own regions, communities, and citizens, much can be learned from the experiences of other states that have led the way in improving college readiness.

The Commission's plan builds on the successful experiences of other states, especially Oregon, Wisconsin, Washington State, and Maryland. Although other states have adopted approaches ranging from incremental strategies to a total restructuring of the educational system, all share some common characteristics, which are reflected in the Commission's plan:

- The need for the K-12 and higher education system to work and change together.
- The need for clear articulation among all segments of the educational system.
- The need to raise expectations.
- The need to define achievement not only according to Carnegie units or seat time but also according to what students should know and be able to do.



Summary of Discussions with Other States

The Secondary and Higher Education Remediation Advisory Commission met with representatives from four other states during the course of its investigation. Some highlights are as follows:

Maryland

Dr. Helen Giles-Gee, Associate Vice Chancellor for the University of Maryland System, described the "Maryland Partnership for Teaching and Learning K-16," which unites most elements of Maryland's educational community and the Maryland Business Roundtable. The Partnership's four-point agenda consists of the following actions: 1) Establish what students are expected to know as they move from one learning experience to another; 2) Provide teacher training and professional development; 3) Eliminate barriers and redundancies; 4) Provide incentives for collaboration among segments.

Like the Commission's plan, higher education faculty in Maryland have clarified the competencies needed for first college courses in English and mathematics.

Wisconsin

Dr. Larry Rubin, Senior Academic Planner with the University of Wisconsin System, says his state expects that K-12 reform will reduce remediation. Dr. Rubin described how dialogue between K-12 teachers and university faculty led Wisconsin's colleges and universities to explore how the admissions process would be affected by the state's transition to competency-based approaches in K-12 education. The result was a collaborative pilot project to test a competency-based Standard Reporting Profile that enables a competency-based admissions system pilot.

Washington

Dr. Jane Sherman, Director of Academic Affairs for the Washington State Higher Education Coordinating (HEC) Board, and Dr. Doug Scrima, a senior policy analyst for the Board, described how the secondary and higher education communities in Washington are collaborating to promote a smooth transition from high school to college.

Both communities are collaborating in developing the standards for a Certificate of Mastery to be awarded to students at age 16 after they demonstrate achievement of core competencies. The Certificate will be one element required for graduation.

Washington's HEC Board also has established minimum standards for entry in a baccalaureate program but preserves diversity through alternative standards that allow a 15% band of underprepared students.

Oregon

Dr. David Conley, director of the Proficiency-based Admissions Standards System Project (PASS) in Oregon and an associate professor at the University of Oregon, described Oregon's efforts to create rigorous academic content standards for K-12 students, which include descriptions of broad knowledge and skills students need for college preparation and success in life.

To earn a Certificate of Initial Mastery, followed by a Certificate of Advanced Mastery, Oregon's K-12 students must successfully complete common assessment tasks that include tests similar to Ohio's proficiency tests, along with assessment tasks, and teacher verifications of competencies. Colleges and universities will use the results of these assessments as part of a proficiency-based admission system.



Appendix E: Speakers Who Addressed the Commission

Clifford Adelman
Senior Research Associate
U.S. Department of Education

David Conley
Director, Oregon Proficiency-based Admissions
Standards System (PASS) Project and Associate Professor
University of Oregon

Helen Giles-Gee Associate Vice Chancellor University of Maryland System

Larry Rubin
Senior Academic Planner
Office of Academic Affairs
University of Wisconsin System

Jane Sherman
Director of Academic Affairs
Washington State Higher Education
Coordinating Board

Doug Scrima Senior Policy Analyst Washington State Higher Education Coordinating Board



Appendix F: Ohio Constituents Who Informed the Commission

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Faculty Member

Columbus City Schools

Tony Atwater

Associate Vice President for

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David Baker Assistant Dean

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Gene Beckett Faculty Member

Shawnee State University

Rikki Blair

Faculty Member

Lakeland Community College

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Alison Burner

Cleveland Scholarship Program

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Joseph A. Caruso

Dean, College of Arts and Sciences

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Sunil Chand

Executive Vice President

Academic and Student Affairs

Cuyahoga Community College

Larry Christman

President, Association of Independent

Colleges and Universities of Ohio

Robert Corbin

State Representative (R-42nd District)

Ohio House of Representatives

Ken Davenport

Faculty Member

Wright State University

Frank Demana

Professor of Mathematics (Emeritus)

The Ohio State University

Salesia Dudley

Student

Kent State University, Stark Campus

Jean Howes

Faculty Member

Berne Union Schools

Phil Huneke

Faculty Member

The Ohio State University



Peter Hutchinson
Faculty Member
Bowling Green State University

Jesse Keith Student Kent State University, Stark Campus

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Lynn Kitchen Faculty Member Sycamore City Schools

Rosalie Kramer Dean, Academic Affairs Central Ohio Technical College

Terry Kuhn Vice Provost and Dean for Undergraduate Studies Kent State University

David Kullman Faculty Member The Ohio State University

Marsha Leonard Superintendent Greene County Career Center

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James McLoughlin Dean, College of Education Cleveland State University

Max Morenburg Faculty Member Miami University

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Muskingum College

Carol O'Shea Faculty Member Owens State Community College

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Kent State University

Jerome Rhodes Student Kent State University, Stark Campus

James Scanlon Provost Youngstown State University

Julie Schaid Member, Board of Education Sugar Creek Local Schools

Frank Schiraldi Associate Director, Professional Development and Licensure Ohio Department of Education



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Jamie Signorino
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Pat Whitten
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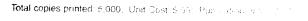
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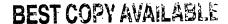
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